

Assignment 7

Textbook Assignment: "Sewing Machines." Pages 9-1 through 9-39.

Learning Objective: *Identify types, operating characteristics, components, and functions of sewing machines used by the PR.*

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| <p>7-1. Sewing machines are classified as how many basic types?</p> <ol style="list-style-type: none">1. One2. Two3. Three4. Four <p>7-2. Which of the following parts of a sewing machine forms the stitch?</p> <ol style="list-style-type: none">1. Rotary hook2. Oscillating shuttle3. Both 1 and 2 above4. Thread take-up lever <p>7-3. Which of the following types of stitches is most commonly used and made by sewing machines?</p> <ol style="list-style-type: none">1. Lock stitch2. Chain stitch3. Compound stitch4. Either 2 or 3 above, depending on the model of machine <p>7-4. Sewing machines have how many basic parts?</p> <ol style="list-style-type: none">1. One2. Two3. Three4. Four <p>7-5. Material that is being sewn on a sewing machine is held in position by which of the following parts?</p> <ol style="list-style-type: none">1. The needle bar2. The pressure foot3. The feed dogs4. The pressure bar | <p>7-6. Which of the following machines is classified as an oscillating machine?</p> <ol style="list-style-type: none">1. 211 w 1552. 111 w 1513. 111 w 1554. 31-15 <p>7-7. What is the recommended stitches per minute for the 31-15 machine?</p> <ol style="list-style-type: none">1. 1,5002. 2,0003. 2,2004. 1,800 <p>7-8. What is the stitch range of the 31-15 machine?</p> <ol style="list-style-type: none">1. 5-32 spi2. 7-32 Spi3. 3-15 spi4. 4-22 spi <p>7-9. The 31-15 sewing machine can sew canvas up to a maximum of how many ounces?</p> <ol style="list-style-type: none">1. 62. 23. 84. 4 <p>7-10. A sewing machine that is in constant use should be oiled how often?</p> <ol style="list-style-type: none">1. Once a day2. Twice a day3. Everytime the bobbin is changed4. Every hour <p>7-11. What type oil is recommended for oiling a sewing machine?</p> <ol style="list-style-type: none">1. 10W mineral2. 20W castor base3. 3-in-14. SAE 30 |
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- 7-12. How much oil is used on each oiling point on a 13-15 machine?
1. One drop
 2. Two drops
 3. Three drops
 4. Until the oil wick is saturated
- 7-13. What is the proper class and variety of the needle used in the 31-15 machine?
1. 7 x 17
 2. 16 x 87
 3. 31 x 15
 4. 87 x 16
- 7-14. A properly timed needle bar on a 31-15 sewing machine will have the needle bar located so that the point of the shuttle will be how far above the eye of the needle on its upstroke?
1. 1/16 in
 2. 1/32 in
 3. 1/4 in
 4. 1/2 in
- 7-15. Prior to making any adjustments on a sewing machine, a good rule to follow is to do which of the following?
1. Set the stitch length to 0 spi
 2. Check the troubleshooting chart
 3. Set the stitch length to 8 spi
 4. Remove the belt from the clutch pulley
- 7-16. When the point of the needle reaches the material, the feed dogs should be at what position?
1. On the down stroke and even with the throat plate
 2. One full tooth above the throat plate
 3. On the up stroke and even with the throat plate
 4. One full tooth below the throat plate
- 7-17. When adjusting the feed eccentric on the 31-15, the stitch regulator should be set at its lowest position. This is done so the machine will do which of the following?
1. Form its shortest stitch
 2. Prevent any loose movement in the feed eccentric
 3. Form its longest stitch
 4. Prevent the needle from hitting the throat plate
- 7-18. What is the recommended setting of the feed dogs for lightweight material?
1. One full tooth above the throat plate
 2. Slightly more than one tooth above the throat plate
 3. Even with the throat plate
 4. Slightly less than one tooth above the throat plate
- 7-19. When selecting a needle to be used on cloth, which of the following type points would you select?
1. A diamond-shaped point
 2. A sharp round point
 3. A triangle point
 4. A half-round point
- 7-20. Why shouldn't a cutting point needle be used when sewing canopy fabric?
1. It will break the top thread
 2. It will break the bobbin thread
 3. It will cut the warp and filler threads
 4. It will not make a lock stitch
- 7-21. What, if anything, is the purpose of the grooves on both sides of a 16 x 87 sewing machine needle?
1. They prevent the hook from striking the needle
 2. They tell the class and variety of the needle
 3. They serve no purpose
 4. They allow the thread to fall back into the needle when it enters the material

- 7-22. What determines the size of a needle?
1. Diameter of the needle
 2. Needle eye size
 3. Both 1 and 2 above
 4. Thread groove size
- 7-23. What determines the correct size of needle to be used on a project?
1. The type of thread
 2. The size of thread
 3. The material to be sewn
 4. All of the above
- 7-24. What size needle would you use if you were going to sew five plies of nylon using type "E" thread?
1. 18
 2. 20
 3. 21
 4. 24
- 7-25. What size needle should you use to sew elastic webbing?
1. 18
 2. 20
 3. 22
 4. 24
- 7-26. When the bobbin is properly threaded into the bobbin case, the bobbin will turn clockwise when the free end of the thread is pulled.
1. True
 2. False
- 7-27. What should you do to prevent the needle thread from fouling when you start to sew?
1. Backstitch 1/4 in
 2. Backstitch 1/2 in
 3. Hold both threads until you have made two or three stitches
 4. Overstitch 1 in
- 7-28. When regulating the tension on the needle thread, you must remember that the
1. needle bar must be all the way down
 2. presser foot must be up
 3. needle bar must be all the way up
 4. presser foot must be down
- 7-29. A properly formed stitch will have the threads locking in which of the following positions?
1. In the bottom ply of material
 2. In the center of the thickness of material
 3. In the top ply of material
- 7-30. What is used to regulate the pressure on the material?
1. The pressure-regulating thumbscrew
 2. The pressure-regulating hex nut
 3. The pressure-regulating spring
 4. The pressure-regulating disc
- 7-31. If the thread take-up spring is not correctly set, you should loosen the setscrew in the arm of the machine and turn the tension adjusting stud in which direction to lessen the movement of the spring?
1. To the right
 2. To the left
 3. Toward the front
 4. Toward the rear
- 7-32. The class 7-33 sewing machine is intended for what type of work?
1. Sewing light to medium canvas
 2. Sewing light canvas only
 3. Sewing medium canvas
 4. Sewing heavy canvas
- 7-33. What is the difference between the 7-31 and the 7-35 machines?
1. The 7-23 has a clutch on the balance wheel
 2. The 7-31 makes a zigzag stitch
 3. The 7-31 has a clutch on the balance wheel
 4. The 7-35 is a heavy weight machine and the 7-31 is a medium weight machine
- 7-34. To remove the bobbin from the 7-33 sewing machine, you must use the bobbin case release spring.
1. True
 2. False

- 7-35. When replacing the bobbin in the 7-33 sewing machine, you should leave about how many inches of thread hanging free from the shuttle?
1. 2 1/2
 2. 2
 3. 3
 4. 4
- 7-36. The class 111 sewing machines are capable of sewing up to how many stitches per minute?
1. 2,000
 2. 2,200
 3. 3,000
 4. 3,500
- 7-37. Which of the following machines would you use for binding heavy materials?
1. 31-15
 2. 111 W 154
 3. 31-TB
 4. 111 W 150
- 7-38. Which of the following parts of a class 111 sewing machine re-engages the needle with the hook driving assembly after clearing a thread jam?
1. Needle-deflecting hook washer
 2. Rotary hook assembly
 3. Rotary hook saddle
 4. Safety-clutch lock stud
- 7-39. What is the first step in timing a 111 W series sewing machine?
1. Set the eccentric on 0 psi
 2. Set the needle bar
 3. Line up the timing marks
 4. Loosen the needle bar pinch screw
- 7-40. The class 111 W 151 sewing machine has what type of feeding action?
1. Needle drop and alternating presser foot
 2. Needle drop
 3. Compound feed only
 4. Vibrating drop
- 7-41. To set a needle bar that has no timing marks, you must first set the feed eccentric to how many stitches per inch?
1. 0
 2. 2
 3. 6
 4. 8
- 7-42. The eye of the needle should be how far below the sewing hook when it is set properly?
1. 1/8 in
 2. 1/16 in
 3. 3/32 in
 4. 5/16 in
- 7-43. When centering the feeding action, what is the distance between the needle bar and the pressure bar?
1. 1/16 in
 2. 7/32 in
 3. 3/32 in
 4. 17/32 in
- 7-44. The 111 W 152 sewing machine has alternating pressers with a lift of how many inches?
1. 1/2
 2. 2/3
 3. 3/8
 4. 5/16
- 7-45. The 111 W 154 sewing machine has a presser foot lift of how many inches?
1. 1/2
 2. 2/3
 3. 3/8
 4. 17/32
- 7-46. On a 111 W class sewing machine, what would indicate that the bobbin case needs oil?
1. The oil wick
 2. The green felt pad
 3. The black felt pad
 4. The oil reservoir
- 7-47. The needle that is used in a rotary sewing machine has how many parts?
1. 5
 2. 6
 3. 7
 4. 8

- 7-48. How is the bobbin thread tension regulated on a rotary type sewing machine?
1. A thumb screw on the machine face
 2. A small screw on the outside of the bobbin case
 3. An adjusting nut on the bobbin case
 4. A small screw on the feed eccentric
- 7-49. What feature on the 211 W 151 sewing machine prevents damage to the sewing hook?
1. An automatic safety gib
 2. A hook gib
 3. A safety pulley
 4. A safety clutch
- 7-50. What is the maximum speed of the 211 W 151 sewing machine?
1. 3,000 rpm
 2. 3,500 rpm
 3. 3,800 rpm
 4. 4,000 rpm
- 7-51. What needle is used in the 211 W 151 machine?
1. 135 x 17
 2. 135 x 7
 3. Either 1 or 2 above, depending on the lift
 4. 16 x 87
- 7-52. With 1/4 inch clearance under the presser foot, what needle is used on a 211 W 151 sewing machine?
1. 135 x 22
 2. 16 x 87
 3. 135 x 7
 4. 1.35 x 17
- 7-53. What needle would you use with a clearance of 3/8 inch?
1. 1.35 x 22
 2. 16 x 87
 3. 135 x 7
 4. 135 x 17
- 7-54. When setting the needle into a 211 w 151, which direction should the long thread groove face?
1. Right
 2. Aft
 3. Forward
 4. Left
- 7-55. When setting the relative position of the presser and needle bar on a 211 W 151 machine, how much clearance must be maintained?
1. 3/4 in
 2. 17/32 in
 3. 3/16 in
 4. 3/32 in
- 7-56. A properly set feed dog on a 211 W 151 machine will show a full tooth above the throat plate when the feed dog is at its lowest position.
1. True
 2. False
- 7-57. The hook saddle on a 211 W 151 machine is lubricated by which of the following methods?
1. A felt pad
 2. An oiling wick
 3. An oil reservoir
 4. A wool pad
- 7-58. Which of the following sewing machines makes a zigzag stitch?
1. 142 W 151
 2. 143 W 2
 3. 142 W 15
 4. 111 w 143
- 7-59. What is the maximum throw of the 143 W 3 needle bar?
1. 9/16 in
 2. 7/16 in
 3. 5/16 in
 4. 3/16 in
- 7-60. What is the maximum throw of the needle bar on a class 143 W 2 sewing machine?
1. 3/8 in
 2. 5/16 in
 3. 1/4 in
 4. 3/16 in
- 7-61. Which direction does the long thread groove face on the 143 W 3 sewing machine?
1. Forward
 2. Aft
 3. Left
 4. Right

7-62. What type of stitch is formed by a model 99R-3 sewing machine?

1. 302
2. 304
3. 306
4. 308

7-63. What will happen if you turn the zigzag regulating knob clockwise as far as it will go on a model 99R sewing machine?

1. It will make a wider stitch
2. It will make a straight stitch
3. It will sew backwards
4. It will make a narrow stitch